We claim:

1.   A method for setting operating parameters of a cardiac rhythm management device, comprising:

   determining the degree of ventricular asynchrony existing in a patient; and

   selecting between a parameter optimization algorithm that maximizes cardiac output and a parameter optimization algorithm that maximizes myocardial contractility based upon the degree of ventricular asynchrony.

2.   The method of claim 1 wherein the degree of ventricular asynchrony is determined by measuring a feature extracted from a cardiac signal.

3.   The method of claim 2 wherein the measured feature is the duration interval of a QRS complex.

4.   The method of claim 2 wherein the parameter optimization algorithm that maximizes cardiac output is a pulse pressure optimization algorithm.

5.   The method of claim 4 wherein the pulse pressure optimization algorithm recommends an optimum AV delay.

6.   The method of claim 4 wherein the parameter optimization algorithm that maximizes myocardial contractility recommends an optimum AV delay based upon a measured intrinsic atrio-ventricular conduction delay.

7.   The method of claim 6 wherein the pulse pressure optimization algorithm is selected in preference to the myocardial contractility maximizing algorithm when a relatively large degree of ventricular asynchrony exists.

8. The method claim 7 wherein a large degree of ventricular asynchrony is indicated by a QRS duration interval greater than 160 milliseconds.

9. The method of claim 1 wherein the selection of a parameter optimization algorithm is further based upon whether the parameter settings recommended by an algorithm are within acceptable ranges.

10. The method of claim 6 wherein the contractility maximizing algorithm is selected when the QRS interval duration is classified as short.

11. The method of claim 10 wherein the contractility maximizing algorithm is selected when the QRS interval duration is classified as medium and a lead of the pulse generator is located in the anterior cardiac vein.

12. The method of claim 11 wherein the pulse pressure optimization algorithm is selected if the QRS interval duration is classified as long.

13. The method of claim 12 wherein the contractility maximizing algorithm, if successful, recommend biventricular pacing with zero offset if the QRS interval duration is classified as short.

14. The method of claim 13 wherein successful execution of the pulse pressure optimization algorithm results in recommendations for chambers to be paced and for the programmed AV delay.

15. The method of claim 14 wherein the pulse pressure optimization algorithm and the contractility maximizing algorithm are both selected if the QRS interval duration is classified as long and neither the right ventricle is the sole paced

chamber nor is the LV offset greater than zero.

16.   A system for setting operating parameters of a cardiac rhythm management device, comprising:

a cardiac algorithm optimizer for determining the degree of ventricular asynchrony existing in a patient and selecting between a parameter optimization algorithm that maximizes cardiac output and a parameter optimization algorithm that maximizes myocardial contractility based upon the degree of ventricular asynchrony; and,

a controller for executing the selected parameter optimization algorithm.

17.   The system of claim 16 wherein the degree of ventricular asynchrony is determined by measuring a feature extracted from a cardiac signal.

18.   The system of claim 17 wherein the measured feature is the duration interval of a QRS complex.

19.   The system of claim 17 wherein the parameter optimization algorithm that maximizes cardiac output is a pulse pressure optimization algorithm.

20.   The system of claim 19 wherein the pulse pressure optimization algorithm recommends an optimum AV delay.

21.   The system of claim 19 wherein the parameter optimization algorithm that maximizes myocardial contractility recommends an optimum AV delay based upon a measured intrinsic atrio-ventricular conduction delay.

22.   The system of claim 21 wherein the pulse pressure optimization algorithm is selected in preference to the myocardial contractility maximizing algorithm when a relatively large degree of ventricular asynchrony exists.

23.   The system claim 22 wherein a large degree of ventricular asynchrony is indicated by a QRS duration interval greater than 160 milliseconds.

24.   The system of claim 16 wherein the selection of a parameter optimization algorithm is further based upon whether the parameter settings recommended by an algorithm are within acceptable ranges.

25.   The system of claim 21 wherein the contractility maximizing algorithm is selected when the QRS interval duration is classified as short.

26.   The system of claim 25 wherein the contractility maximizing algorithm is selected when the QRS interval duration is classified as medium and a lead of the pulse generator is located in the anterior cardiac vein.

27.   The system of claim 26 wherein the pulse pressure optimization algorithm is selected if the QRS interval duration is classified as long.

28.   The system of claim 27 wherein the contractility maximizing algorithm, if successful, recommend biventricular pacing with zero offset if the QRS interval duration is classified as short.

29.   The system of claim 28 wherein successful execution of the pulse pressure optimization algorithm results in recommendations for chambers to be paced and for the programmed AV delay.

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30.   The system of claim 39 wherein the pulse pressure optimization algorithm and the contractility maximizing algorithm are both selected if the QRS interval duration is classified as long and neither the right ventricle is the sole paced chamber nor is the LV offset greater than zero.

31.   The system of claim 16 wherein the cardiac algorithm optimizer is implemented as software executed by an external programmer.

32.   The system of claim 16 wherein the cardiac algorithm optimizer is implemented as software executed by the controller.